

REMARKS

Claims 1, 3-40 and 42-45 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 15 and 39 Under 35 U.S.C. §101

Claims 15 and 39 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Withdrawal of this rejection is respectfully requested for at least the following reasons. The subject claims are directed to a computer implemented system for downloading/distributing resources, and produce useful, concrete and tangible results.

Because the claimed process applies the Boolean principle [abstract idea] ***to produce a useful, concrete, tangible result*** ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed. Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been ***reduced to some practical application rendering it "useful."*** *AT&T* at 1357 *citing In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

Contrary to the assertions made in the Final Office Action, the subject claims provide for a useful invention as disclosed in applicant's specification. Independent claims 15, 39 recite means for distributing/downloading resources in an intelligent manner (*e.g.*, to efficiently manage resources). The subject Specification provides ample examples of practical applications along with satisfactory explanations illustrating the usefulness of such efficient distribution/download methodology. The Specification discloses various optimizations and cost benefits, wherein distribution of the downloaded resources can be optimized over the

intermediate storage facilities, such that the total request to receive time is minimized; (*see* the subject Specification at page 28, lines 20-24; page 22, lines 9-15; *see also* page 28, lines 20-24; *see also* page 39, lines 20-22, page 50 lines 15-20; *see also* page 105, lines 19-25.) The “means for” limitations described above are identified as limitations subject to the provisions of 35 U.S.C. §112 ¶6. Exemplary corresponding structures are identified with reference to the specification in the parenthetical above, which correspond to respective claim limitations.

In view of at least the above, it is readily apparent that the claimed invention reduces to a practical application that produces a useful, concrete, tangible result. Thus, the subject claims satisfy the utility requirement of 35 U.S.C. §101 and this rejection should be withdrawn.

II. Rejection of Claims 16, 17-38, 40 and 42-45 Under 35 U.S.C. §112

Claims 16, 17-38, 40 and 42-45 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, and for omitting essential steps under MPEP §2172.01. Applicant’s representative respectfully submits that such section of the MPEP does not impose a requirement for recitation of the preamble within the body of the claim, and that no essential act has been omitted from the subject claims. The subject Specification discloses more than one embodiment, and a plurality of aspects related to downloading/distributing resources have been described therein (*e.g.*, *see* page 18 lines 17-20; *see* page 50 lines 15-20; *see* page 25 lines 15-21; *see also* page 50 lines 15-20). Withdrawal of this rejection is respectfully requested.

Independent claim 16 recites a method of downloading resources, while maximizing an expected value of downloaded resources, and changing a storage capacity of the intermediate storage facility (which the resources are downloaded therein) based on a change of the expected value of the downloaded resources. Accordingly, distribution of resources can be optimized among the storage facilities. Likewise, independent claim 17 recites a method of down loading resources, while changing a storage capacity of the intermediate storage facility based on a value and cost associated therewith. Moreover, a cost of accessing the resources in an unloaded condition is determined, to facilitate an intelligent installment and/or distribution of resources that conserves resources.

In addition, independent claim 32 recites a method of distributing resources among at least two storage facilities, by determining for each resource a value density in a knapsack approximation procedure, which is based on a change in value of storing the resource on a first storage facility, as compared to storing such resource on the second storage facility. Moreover, given a total size of resources being less than the finite available capacity of the first storage facility, the subject invention maximizes a total value density.

Likewise, independent claim 39 recites intelligently downloading resources to intermediate storage facilities. For example, distribution of the downloaded resources can be optimized over the intermediate storage facilities such that the total request to receive time is minimized. In addition, distribution of the downloaded resources can be optimized over the intermediate storage facilities, such that the total request to receive time is minimized. Moreover, a cost of accessing the resources in a non down-loaded condition is determined, to facilitate such intelligent installment and/or distribution of resources that conserves resources.

Similarly, independent claim 40 recites downloading resources to intermediate storage facilities, wherein such downloaded resources are optimally distributed over the intermediate storage facilities. Such distribution of the downloaded resources can be optimized over the intermediate storage facilities, wherein the total request to receive time is minimized; and a cost of accessing the resources in a non-downloaded condition is determined, to facilitate an intelligent installment and/or distribution of resources that conserves resources.

Accordingly, the subject independent claims positively recite limitations/elements, and clearly define the metes/bounds of applicant's invention, to enable one skilled in the art to readily determine whether or not a particular collection of components infringe the collection of the interrelated components as defined by such independent claims. (*See Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 - Fed. Cir. 2004). Accordingly, it is respectfully submitted that the subject claims satisfy the requirements of 35 U.S.C §112. If the Examiner believes otherwise, the Office Action should specifically point out the language of the subject claims that are deemed indefinite.

III. **Rejection of Claims 1, 3, 4-19 and 21 Under 35 U.S.C. §103(a)**

Claims 1, 3, 4-19 and 21 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson (US Patent 5,918,014) in view of Drewry, *et al.* (US Patent 5,925,100) in further view of Cherkasova, *et al.* (US Patent 6,425,057). Withdrawal of this rejection is respectfully requested for at least the following reasons. The combination of references as suggested in the Office Action does not teach or suggest applicant's invention as recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. ***Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.*** See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant's claimed invention in part is directed to methods and systems of downloading /distributing resources (*e.g.*, software components) among intermediate storage facilities and/or receivers, wherein a ***cost of accessing/returning*** to the resources in an ***unloaded condition*** is determined (*e.g.*, see page 39, lines 20-22, page 50 lines 15-20). For example, the probability of having to return to a CD-ROM resource during a life cycle of a product can be evaluated/determined, and an associated cost employed to make decisions regarding a download. (See page 39, lines 20-22). Also, the claimed invention further enables changing a ***constraint associated with the intermediate storage*** facility, based on an associated change in value and cost. For example, a read access time or capacity of such intermediate storage facility can be changed, based on an associated variance in value and cost (*e.g.*, see page 28, lines 20-24). As such, an intelligent installment/distribution of resources can be provided, which conserves storage resources (*e.g.*, see page 1, lines 5-15; see also page 22 lines 5-15.) Such aspects of applicant's claimed invention are not taught or suggested by Robinson.

Rather, Robinson is directed to showing new ads to different people (typically without a request being made for such new ads), based on their past activities. Robinson tracks activities

of a subject in an interactive medium to determine which advertisement to present to the user. Robinson does not teach or suggest: “minimizing *request-to receive time*”; or “evaluating a cost of *changing a constraint* associated with the intermediate storage facility,” and “*returning to resources in unloaded condition*”; as in applicant’s claimed invention. In particular, there logically exists a distinction between “cost of *not accessing* a resource” as purportedly disclosed in Robinson – versus – “cost of *accessing* a resource in an *unloaded condition*”, as in the claimed invention.

Independent claim 1 recites “distributing [...] *to minimize total request-to-receive time*”, and “evaluating a *cost of accessing resources in unloaded condition*”. Likewise, independent claim 15 recites “means for optimizing distribution over intermediate storage facilities *to minimize total request-to-receive times*”, and “means for evaluating a cost to *retrieve resources in a non-downloaded condition*.” Also, the limitations of “*changing a storage capacity of the intermediate storage*”, and “*determining a cost of accessing* a resource in an *unloaded condition*” are respectively recited in independent claims 16 and 17.

In view of the at least above comments it is readily apparent that Robinson does not teach or suggest the subject invention as recited in independent claim 1 (and claims 3, 5-8, 11, 13, 14 dependent therefrom), independent claim 15, independent claim 16, independent claim 17 (and claims 18-20 dependent therefrom). Moreover, Drewry *et al.* in further view of Cherkasova, fails up to make for the aforementioned deficiencies of Robinson with respect to such independent claims. Withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 22-31, 39-40 and 42-45 Under 35 U.S.C. §103(a)

Claims 22-31, 39-40 and 42-45 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson in view of Drewry, *et al.* in view of Cherkasova, *et al.*, and in further view of Fischer, *et al.* (US Patent 6,438,672). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claim 22 recites “*minimizing* total expected request to receive time [...] and *changing a storage* space associated with the intermediate storage facility, based on the *minimizing act*.” As explained earlier, such aspects of the claimed invention are not taught or suggested by Robinson. Moreover, Drewry *et al.* and Cherkasova *et al.* in view of Fischer *et al.*

fail to make up for the aforementioned deficiencies of Robinson with respect to independent claim 22.

Likewise, independent claim 39 recites “means for evaluating a cost to return to resources in non-downloaded condition”, and independent claim 40 recites “determining a cost of **returning to resources in an unloaded condition**”; as explained earlier Robinson fails to teach or disclose such aspects of the claimed invention. Furthermore, Drewry *et al.* and Cherkasova *et al.* in view of Fischer *et al.* fail to make up for the aforementioned deficiencies of Robinson with respect to independent claims 39 and 40.

In view of the at least above comments it is readily apparent that the cited references do not teach or suggest the subject invention as recited in independent claim 22 (and claim 23-31 dependent therefrom), independent claim 39, and independent claim 40 (and claims 42-45 dependent therefrom). Withdrawal of this rejection is respectfully requested.

V. Rejection of Claims 32-38 Under 35 U.S.C. §103(a)

Claims 32-38 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson in view of Drewry, *et al.*, in view of Cherkasova, *et al.*, in further view of Fisher, *et al.* and in further view of Ganz, *et al.* (US Patent 6,049,549). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claim 32 recites “**a first determining** a probability [...] **a second determining** [...] **a change in value of** storing the resource on a first storage facility versus [...] a second storage facility; determining, a **change in cost of** storing the resource on the first storage facility versus storing the resource on the second storage facility; determining, for each resource, a value density in a knapsack approximation procedure based on the change in value **via the first determining act and the second determining act**[...]”. Accordingly, the knapsack approximation procedure of the subject innovation is based on the first and second determining act.

Such aspects of the claimed invention are not taught or suggested by the knapsack procedure of Ganz *et al.*, which merely discloses existence of such procedure, and applies it to a capacity distribution of a communication system. Moreover, Robinson in view of Drewry *et al.*, and in view of Cherkasova *et al.* and further in view of Fischer *et al.* fail to make up for the aforementioned deficiencies of Ganz *et al.* with respect to independent claim 32.

Furthermore, the Office Action relies on improper motivation to combine and/or modify the references. In general, the rationale proffered is to achieve benefits identified in applicant's specification, which overcome problems associated with conventional systems/methods. Applicant's representative respectfully submits that such rationale is an unacceptable and improper basis for a rejection under 35 U.S.C. §103. In essence, the Examiner is basing the rejection on the assertion that it would have been obvious to do something not suggested in the art because so doing would provide advantages stated in applicant's specification. This has been condemned by the CAFC. *See, for example, Panduit Corp. v. Dennison Manufacturing Co.*, 1 USPQ2d 1593 (Fed. Cir. 1987). It is noted that even if the references are combined, applicant's claimed invention does not result. Withdrawal of this rejection is respectfully requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP291US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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